

### **REMARKS**

This Amendment is responsive to the current office action and provides a summary of the Interview previously held with the Examiner. As will be discussed below, the claims have been amended to encompass features discussed with the Examiner, which were indicated to place the claims in condition for allowance over the currently Kaufman patent (U.S. Patent No. 6,251,048).

Claims 3, 4, 6, 7, 9, 11-15 17, 19, 22-25 and 28 have been amended. No new matter has been inserted. Claim 10 has been cancelled without prejudice by this Amendment. Claims 3-9, 11-17, 19-28 and 30 remain pending in the application. Applicant respectfully requests reconsideration of the Examiner's rejections.

Independent claims 3, 17 and 22 have been amended to include that the electronic assembly of Applicant's invention includes a timer unit where time of day and/or time interval (defined to mean length of time between sessions, with a relative significant amount of time between sessions, such as, but not limited to, every 4 hours, 6 hours, etc.) information is programmed to inform the microcontroller when to begin to send a prompting message to the user to begin using the medical device or apparatus. As also now claimed, this initial prompting message is generated and sent by the microcontroller without and before any use of the medical apparatus or device by the user. Thus, the prompting message is what gets the user to begin using the medical device or apparatus. Kaufman fails to contain a timer unit and also fails to disclosing time of day or time interval information being programmed into its electronics. Kaufman is completely silent and fails to disclose in anyway prompting the user to begin doing an exercise to start an exercise session.

In addition to the above newly added language to the claims, Applicant respectfully submits that Kaufman also fails to teach many of the claim features existing in the previous version of the claims. Below, Applicant will discuss these differences between Applicant's invention and the cited Kaufman patent.

CLAIM 3 – Kaufman only works with a digital switch and cannot read analog inputs such as gauges, floats, pressure meters and thermistors, which are all devices typical of medical application. Applicant claims that the electronic assembly is in communication with the gauge of the medical apparatus. Kaufman fails to teach this feature and as noted above cannot read analog inputs from a gauge. It thus also follows that Kaufman is silent regarding converting an analog signal into digital information. Thus, Kaufman cannot provide an actual measurement value achieved by the user from use of a medical apparatus or a measurement reading from the medical apparatus. Kaufman does not automatically generate prompting/alerting messages. Rather, it requires movement from the user. If Kaufman's device was in the room with a patient, it could not on its own begin to prompt the user to use the device. Kaufman requires the user to initiate use before it gets involved. Kaufman fails to send a verbal prompting message to initiate use. Kaufman does not have a real-time clock and cannot record time of day or date. Therefore, Kaufman cannot wake up on its own and prompt the user at any given schedule. Kaufman fails to teach programming the microcontroller to send a verbal message to prompt the user to initiate use.

CLAIM 4 – Kaufman is completely silent regarding the microcontroller using mathematical and logic calculations from information received from a gauge.

CLAIM 5 – Kaufman is completely silent regarding converting an analog to digital or vice versa.

CLAIM 6 – Again no analog to digital conversion being performed by Kaufman and Kaufman cannot communicate with a gauge.

CLAIM 7 – Kaufman does not and cannot communicate with a gauge.

CLAIM 8 – Kaufman does not and cannot communicate with a level setting unit and does not compare a measurement represented by a signal input to a programmed threshold level.

CLAIM 9 - As mentioned above, Kaufman fails to send a verbal prompting message to initiate use. Kaufman does not have a timer unit, real-time clock and cannot record time of day or date. Therefore, Kaufman cannot wake up on its own and prompt the user at any given

schedule. Kaufman also fails to teach programming the microcontroller, on its own, to send a verbal message to prompt the user to initiate use.

CLAIM 11 - Kaufman has no real time clock and cannot record time of day or date. Thus, Kaufman's assembly cannot operate as described in Claim 11.

CLAIM 12 - Kaufman has no real time clock and cannot record time of day or date. Thus, Kaufman's assembly cannot operate as described in Claim 12. Furthermore, even if the word "set" could be considered a prompting message as alleged by the Examiner, Kaufman does not state that the word "set" is repeated in the exercise program until the exerciser performs another set, whether in the current exercise session or a future exercise session. Additionally, Kaufman does not even provide for programming the number of sets. It only discusses entering the number of reps, the repetition of rate and the enunciation pattern. As such, Applicant respectfully submits that the word "set" has absolutely no prompting purpose and is merely an indication to the exerciser that he or she reached the number of physical exercise reps entered by the user before beginning to exercise. The exerciser or user begins to exercise on his or her own and not through any efforts that Kaufman teaches, as his teachings are that the device is completely silent and inactive until the exerciser/user begins entering information and/or begins to exercise.

CLAIM 15 - Again Kaufman fails to provide for a real-time clock or timer unit and only works based off movement from the exerciser not any pre-programmed time.

CLAIM 16 - Again Kaufman cannot read measurements from a gauge.

CLAIM 17 - Kaufman only works with a digital switch and cannot read analog inputs such as gauges, floats, pressure meters and thermistors, which are all devices typical of medical applications. Applicant claims that the electronic assembly is in communication with the gauge of the medical apparatus. Kaufman fails to teach this feature and as noted above cannot read analog inputs from a gauge. It thus also follows that Kaufman is silent regarding converting an analog signal into digital information. Thus, Kaufman does not receive an actual measurement or result achieved by the user. Kaufman does not automatically generate prompting messages to

initiate use of the Kaufman exercise device, nor is Kaufman preprogrammed with time of day information or time period intervals between separate sessions for automatically generating and providing audible verbal prompting messages. Rather, Kaufman requires movement from the user. Thus, the user, on his or her own, must be responsible for starting the exercise without any prompting or encouragement from the Kaufman device. If Kaufman's device was in the room with a patient, it could not on its own begin to prompt the user to use the device. Kaufman requires the user to initiate use before it gets involved. Kaufman is completely silent regarding the microcontroller using mathematical and logic calculations from information received from a gauge. Kaufman fails to send a verbal prompting message to initiate use. Kaufman does not have a real-time clock and cannot record time of day or date. Therefore, Kaufman cannot wake up on its own and prompt the user at any given schedule. Kaufman fails to teach programming the microcontroller to send a verbal message to prompt the user to initiate use prior to any use of the Kaufman device by the user.

CLAIM 19 - Kaufman is completely silent regarding the microcontroller using mathematical and logic calculations from information received from a gauge. No analog to digital conversion or vice versa is performed by Kaufman. Kaufman cannot communicate with a gauge.

CLAIMS 20 and 21 - No mathematical calculations being performed by Kaufman. Kaufman does not compare a measurement achieved by the user to a preprogrammed target measurement. Kaufman merely counts the numbers of reps from an exercise set and indicates when the desired number of reps has been achieved. This is different from comparing a measurement value to a threshold measurement value from use of a medical apparatus or device. Applicant's claimed invention provides a verbal encouragement messages based on the result as compared to the programmed threshold. Thus, Applicant's device envisions and strives for the user to exceed the programmed threshold and sends a certain threshold exceeding measurement or result has been achieved and a different measurement with the threshold measurement or result has not been received. Kaufman does not send a message for exceeding a threshold.

Rather, Kaufman merely counts repetitions and once the desired number of reps has been reached, Kaufman informs the user that the number has been reached with the one word statement "set". There is no contemplation in Kaufman for providing encouragement messages for exceeding the number of reps for the set, as this is not the purpose of the Kaufman device.

CLAIM 22 - Kaufman only works with a digital switch and cannot read analog inputs such as gauges, floats, pressure meters and thermistors, which are all devices typical of medical application. Applicant claims that the electronic assembly is in communication with the gauge of the medical apparatus. Kaufman fails to teach this feature and as noted above cannot read analog inputs from a gauge. Thus, Kaufman is silent regarding converting an analog signal into digital information. Kaufman does not receive an actual measurement or result achieved by the user. Kaufman does not automatically generate prompting messages without any input from the user, nor based on a programmed time. Rather, it requires movement from the user. If Kaufman's device was in the room with a patient, it could not on its own begin to prompt the user to use the device. Kaufman requires the user to initiate use before it gets involved. Kaufman is completely silent regarding the microcontroller using mathematical and logic calculations from information received from a gauge. Kaufman fails to send a verbal prompting message to initiate use. Kaufman does not have a real-time clock and cannot record time of day or date. Therefore, Kaufman cannot wake up on its own and prompt the user at any given schedule. Kaufman fails to teach programming the microcontroller to send a verbal message to prompt the user to initiate use.

CLAIM 23 - Kaufman has no real time clock and cannot record time of day or date. Thus, Kaufman's assembly cannot operate as described in Claim 23. Furthermore, even if the word "set" could be considered a prompting message as alleged by the Examiner, Kaufman does not state that the word "set" is repeated until the exerciser performs another set. Additionally, Kaufman does not even provide for programming the number of sets. It only discusses entering the number of reps, the repetition of rate and the enunciation pattern. As such, Applicant respectfully submits that the word "set" has absolutely no prompting purpose and is merely an

indication to the exerciser that he or she reach the number of reps entered by the user before beginning to exercise. The exerciser begins to exercise on his or her own and not through any efforts of Kaufman which remains completely silent and inactive until the user begins entering information and/or begins to exercise.

CLAIM 24 - Kaufman has no real time clock and cannot record time of day or date. Thus, Kaufman's assembly cannot operate as described in Claim 24. Furthermore, even if the word "set" could be considered a prompting message as alleged by the Examiner, Kaufman does not state that the word "set" is repeated until the exerciser performs another set. Additionally, Kaufman does not even provide for programming the number of sets. It only discusses entering the number of reps, the repetition of rate and the enunciation pattern. As such, Applicant respectfully submits that the word "set" has absolutely no prompting purpose and is merely an indication to the exerciser that he or she reach the number of reps entered by the user before beginning to exercise. The exerciser begins to exercise on his or her own and not through any efforts of Kaufman which remains completely silent and inactive until the user begins entering information and/or begins to exercise. Again Kaufman fails to provide for a real-time clock and only works based off movement from the exerciser not any programmed time.

CLAIM 25 - Kaufman is completely silent regarding the microcontroller using mathematical and logic calculations from information received from a gauge. No analog to digital conversion or vice versa being performed by Kaufman. Kaufman cannot communicate with a gauge.

CLAIM 26 - Only the number of reps is entered by Kaufman. Kaufman does not indicate that a message is provided if the user exceeds the number of reps.

CLAIM 28 - Kaufman fails to discuss storing any information regarding the number of repetitions performed by the user, or the user's heart rate, distance traveled information or calories burned information. As Kaufman has no Flash memory it has no ability to store information such as patient performance data for later use. Applicant's stored information is accessible or retrieval for later user after the user has finished using the medical apparatus for his

or her session. Kaufman makes no mention nor does it have the ability to allow the user to go back, at a point in time after the exercise routine is over, and retrieve or access any information concerning the user's exercise.

CLAIM 30 - Kaufman fails to disclose any external data interface circuitry so there is no way to download or transmit any data to an external device or remote location. Furthermore, as mentioned above, Kaufman has no memory for storing performance data achieved by the exerciser.

Some general comments concerning the Kaufman patent and why it would not be used for the purposes that Applicant's claimed invention is used for include:

1. Kaufman's circuit represents a simple I/O (input/output) device not an integrated system. The TSP50C11 used in the circuits implies the fundamental limitations of the Kaufman device as it is 90% speech synthesizer chip and 10% processor, with the processor being a state machine. A TSP50C11 is an audio player as opposed to a processor, as it takes the digital inputs and selects the audio sample to play. The data sheet for the TSP50C11 references a DTMF generator and Sample Music programs. DTMF tones are the sounds given by your telephone keypad, so the device is using the inputs to select the tones that it sends to the speaker. The sample music program is using the inputs to select music tracks

2. As referenced above there is no real-time clock on the Kaufman device so it cannot record the time of day or date and cannot wake up and prompt the user at any given schedule.

3. Kaufman contains no SPI Flash memory so there is no ability to store information such as patient performance data for later use.

4. Kaufman fails to show or disclose any analog to digital conversion. Therefore, it cannot read analog inputs such as gauges, floats, pressure meters, and thermistors, which are all devices typical of medical applications. Thus, the Kaufman circuit is limited to digital inputs most generally in the form of switches. Even with the digital inputs there is a limitation in that rates cannot be accurately measured because there is no timebase in the form of a real-time clock or hardware counter. For instance, the unit can count the number of heartbeats, but it cannot

concurrently count the time elapsed to give a medically accurate heart rate in beats per minute. Thus, the Kaufman device cannot perform two functions at the same time. The unit can likewise only emulate measurement of calories burned. By counting the number of rotations of a stationary bicycle or the number of steps on a stairmaster-type machine, the unit can calculate an approximation of calories burned but true measurement to medical accuracy cannot be attained by the disclosed Kaufman device.

5. Kaufman fails to provide for external data interface circuitry so there is no way to download or communicate to an external device (i.e. personal computer or palm pilot-type device) for record-keeping.

6. Also, the amount of memory on the Kaufman device can allow for only limited speech and would not be able to perform any complicated interactive feedback with a patient. The disclosed Kaufman device has only approximately 16 Kbytes of space which would translate to only about 2 seconds of speech.

7. Unlike Kaufman, the present invention provides at least one verbal prompt and the logical ability for a plurality of verbal prompts consisting of phrases and/or complete sentences.

8. It is readily seen that Kaufman solely teaches a minimal amount of kilobytes (16KB) in the micro processor for the memory required for the function of his invention. This is capable of providing only one or two words to be communicated to the user for physical exercise purposes as taught by Kaufman. Thus making Kaufman's function incapable of providing the complicated tasks claimed by the applicant, (i.e. word, words, or phrases), simultaneously along with measurement. As such, Kaufman is incapable of being used for the purposes of Applicant's invention. There is no comparison between the minimal capabilities of Kaufman to the limitless and unique functions that the Applicant has with Applicant's claimed and disclosed electronic assembly. Kaufman's limited circuitry and memory is substantially different, primitive and inferior to the electronic assembly shown, claimed and disclosed in Applicant's invention. Thus, it is readily apparent that Kaufman could not be used as claimed by Applicant. It is also readily apparent that there is no motivation or justification or intention to modify Kaufman's



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invention in order to be used for the purposes claimed and disclosed by Applicant. Furthermore, it is important to remember that in addition to the significant differences in electronic components, Kaufman is only being used with exercise equipment, as opposed to Applicant's invention that is claimed for use with medical equipment.

#### **SUBSTANCE OF THE INTERVIEW**

A telephone interview was conducted between Applicant's counsel and Examiner Astorino. The above noted Kaufman patent was discussed and the Examiner and Applicant discussed further features (i.e. timer unit) to add to the independent claims that were not present in the Kaufman patent. The Examiner also acknowledged that Kaufman does not continue to send verbal prompting messages if the device is not used, as claimed by Applicant in certain claims. Applicant has amended the independent claims to include the timer unit and that the timer unit is programmed with time of day or session time interval information which informs Applicant's invention when to automatically send a prompting message and without any assistance or input from the user or anybody else.

In view of the above, Applicant respectfully requests that the Examiner withdraw all rejections. Favorable action passing Applicant's application to allowance is respectfully requested. If there are any additional charges, including extension of time, please bill our Deposit Account No. 503180.

Respectfully submitted,

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